



Investigating the impact of Teamwork on Academic performance of students in Kenyan Secondary schools of Kajiado County.

Corresponding Author,

Decima D. Mutimba

Master's student, Public Policy and Administration – Kenyatta University, Kenya.

Dr. Edna Moi

Lecturer, Department of Public and Administration – Kenyatta University, Kenya.

Abstract

The paper seeks to investigate the impact of teamwork on academic performance. A descriptive design was used in the research study. It targeted a population of 30 administrators, 50 H.O. D's & D.O. S's, 100 teachers and 150 students. The sample population was achieved through use of simple random sampling technique. Data was collected from the respondents through the use of a questionnaire. Analysis of the data was then done using qualitative content analysis for qualitative data whereas quantitative data was presented using SPSS. Inferential data analysis was used to make general conclusions for a large population whereas Multiple regression model was used for regression analysis. In conclusion, the researcher explored how team work influenced academic performance of secondary schools in Kajiado County. From the findings, team work greatly had an effect on academic performance of secondary schools in Kajiado County. There was a positive correlation with influence of team work having the highest correlation of 0.780.

1.1 Background information

In accordance with the principles of leadership, the leader must try to persuade, inspire, direct, and advise colleagues, pupils, parents, and other relevant parties to collaborate in order to achieve predetermined goals. The principal must have a convincing and excellent demeanor in order to instill this function. The principal needs to be aware of how their leadership style affects the success and functioning of the school environment for which they are heading. In order to increase teacher effectiveness and student progress, the principal's role as a teacher is essential. What specific school leadership practices work best to raise student achievement and teacher effectiveness is still a mystery. Effective Principal's leadership qualities were restricted to task structure, position power, and the interaction that happens between leaders and their subjects. (Jawatir Pardosi, Tria Ina Utari, 2021).

The impact of leadership principles on performance in a variety of industries, including business, health, academia, and government, has been the subject of numerous international empirical

According to a 2014 study by Hesselgreaves and Scholarios, transformation leadership has a beneficial impact on job commitment, job satisfaction, and performance in the hospitality sector. According to a 2017 study by Goleman et al., emotional intelligence, a crucial element of effective leadership, was positively correlated with improved team performance across a range of enterprises. According to a study by Yang and Mossholder (2018), ethical leadership enhanced job performance and organizational commitment by favorably influencing organizational citizenship behavior. According to a study by Judge and Piccolo (2019), servant leadership was linked favorably to organizational commitment, work performance, and job satisfaction across a range of industries. According to Reimann et al (2020)'s research, authentic leadership had a favorable impact on workers' well-being, which in turn increased output and job satisfaction.

Team members will feel emotionally safe when they work together, more self-assurance, and will be more capable of collaborating on choices and set plans. Additionally, there's establishment of worthwhile goals, creative endeavors, helpful strategies, and admirable ideals at work. A lack of collaboration principles, on the contrary, can lead to low morale, poor results/ output disappointment and failure in different occupations. All these may constitute a threat to the company as a whole. An organization which does not place a high emphasis on cooperation of employees typically fall short of expectations achieving the goals and aspirations of the organization. Employees must understand the value of cooperation in order to successfully work together to achieve common aims and goals (Shouvik Saryal and Mohammed Wamique Hisam, 2018).

1.2 Statement of the problem

School administrators are under a lot of pressure to show how their efforts have improved the school. Principals in particular play a crucial role in establishing direction and developing a supportive school climate that includes a proactive school mindset (Christopher Day & Pamela Sammons, 2016)

There are thousands of secondary schools in Kenya (M.O.E 2021). According to the M.o.E, all the schools had to be under the leadership of a Chief Principal/ Principal backed up by the (B.o.M). The schools were divided under three main categories which are: National schools, Extra- County schools, and County schools. Some of these schools had been categorized as boarding/ day schools, mixed schools and/or those separate with girls only or boys only. Some schools were privately owned whereas some were Government owned. Majority of the schools however fell under the category of County schools followed by Extra County and with only two National schools. All these schools were under the leadership of a school principal.

National schools were given the students who scored highly in the KCPE exams level. The Extra County schools were given middle level performers whereas the county schools were given the lowest performing group of students in terms of performance at KCPE level. Irrespective of the above groupings, the recent past years had seen some schools in the middle or lower category perform better in the National exams KCSE than their counter parts in a different category. In this regard, the researcher noted that the performance of the schools in Kajiado County had differed greatly with some schools in the County category producing better results than those in the Extra County and/or National category.

All in all, the aforementioned schools had teachers who were under the leadership of the principal as the head of the institution or overall head, and other team leaders who were H.O.Ds. All these people worked together to ensure good academic performance of the students in their schools under the leadership of the principal. The researcher however thought that for the principal to properly lead the team to success, he/ she needed to employ various leadership principles such as; team work to improve or achieve good academic performance.

Members of an organization or learning institution can easily achieve their objectives through team work. This is so much possible in a case where the leader is sensitive on promoting team work and supporting each member of the team to achieve their best whilst supporting each other. The worst of results for some schools in Kajiado County could be as a result of lack of cooperation and team work.

1.5 Justification and Significance of the Study

The study sought to fill the gap on teamwork as a leadership principle and how it influences performance of schools within secondary schools in Kajiado County. The study's findings will help principals and other school administrators understand how their teamwork affects the outcomes and performance of the many institutions they are in charge of. Through this study, leaders and in this case the principals will work towards achieving the school's objectives through practicing teamwork among teachers and even students.

2.0: Theoretical Literature Review.

2.1 Team work

Team work and employee performance is one area that has been studied by many researchers and this is because team work is a strong influence to an organizations performance as well as the employees working in the organization. Leaders in any organization have to encourage team work among the team members in an organization. The personnel are given the necessary professional knowledge to accomplish and realize their plans, visions and goals together with organizational objectives, which in turn activates and improves their performance. (Shouvik & Mohammed, 2018).

In Turkish schools, the effect of cooperation on teacher effectiveness and academic achievement of students was examined in a study by Arar and Korucu (2020). The study discovered a positive relationship between teacher efficacy and student academic achievement and effective cooperation techniques, such as regular communication and collaboration among teachers. Cheung and Liu (2018) investigated the effect of cooperation on teacher professional development in Hong Kong schools in their study. According to the study, good cooperation techniques were crucial for teacher professional development. These techniques included having a common vision and goals, working together to plan, and providing supportive leadership. Keating and Rains' (2019) study looked at how collaboration affects school leadership in American schools. For good academic results and the development of a pleasant school climate, the study indicated that effective teamwork techniques, such as shared decision-making, open communication, and collaboration, were crucial. Meier et al. (2020) investigated the effect of cooperation on school improvement in Swiss schools in their study. According to the study, good cooperation techniques are crucial for school growth. They include regular communication, having a common vision and goals, and working together to solve problems.

Raja and Sabir's (2021) empirical study examined how cooperation might improve the standard of instruction in Pakistani schools. According to the study, effective cooperation techniques including shared goals, mutual trust, and cooperative problem-solving were crucial for raising the standard of instruction in classrooms. Another empirical study, conducted by Parnell et al. in 2021, looked at how teamwork affected teachers' well-being in Australian schools. According to the study, encouraging leadership, transparent communication, and shared decision-making are crucial for fostering effective cooperation and enhancing teacher wellbeing. Bruns and Leontyeva's (2021) study looked at how teamwork affected school leadership in Russian schools. The study discovered that supportive leadership, cooperative decision-making, shared objectives, and successful teamwork techniques were crucial for effective school leadership and developing a positive school culture.

In a study by González-Montesinos et al. (2021), the authors explored how teamwork impacted on student achievements in academics in Spanish schools. It was found out that effective teamwork practices, such as shared

planning, collaborative problem-solving, and supportive leadership, positively impacted student academic achievement.

Team performance may be affected differently by several components of teamwork. In this situation, team members work on both individual and team-level tasks. The ultimate results from teamwork are characterized by teams which have the good communication and collaboration among the members of the team. Factors that influence good teams include; team composition, work structure and task characteristics. All the above affects team performance in one way or another. Teamwork has however a drawback which is time consuming to administer. School workers will have teams such as the academic departments involving Sciences, Humanities, Languages etc. and non-academic departments. (Mark I. Hwang, 2018).

Nkosi S. (2015) however argues that employees of an organization have to maintain a shared vision of what their goals are for the organization to be able to achieve its objectives. The employees have to understand the clear aims and objectives of the organization and strive to achieve them, otherwise team work would be rendered ineffective.

Employees engagement in team work has come up as a critical driver in the success of businesses, says; (Ravikumar, 2013). He further states that employees engaged in team work can be a deciding factor in organizational success.

In this instance, the researcher will be finding out if team work has influence on academic performance either positively or negatively. (Wendt, Euwema & Emmerik, 2009)

3.0 Research Design

A descriptive research design was adopted for this study. It analyzed the effect of one entity on another, (Sharma Sohil, 2019) in this case, the effect of independent variable on dependent variable. The design helped to describe the impact of team work to the academic performance in schools. The descriptive approach aided in providing specific information about the study's problem. This gave a broad overview and helpful hints about the factors being tested quantitatively.

3.1 Location/ Site of the study.

Kajiado County is one with four sub-counties found in the Rift-valley region in Kenya. Its physically vast though mostly populated in the town areas. The research will take place in the Kajiado North Sub-County which has a total of 50 secondary schools. Out of the 50 schools only 10 have been scoring a mean of 5.0 and above for the past 5 years. The researcher picked on this location in order to find out why the academic performance was not even average yet there was leadership in all the 50 schools and only a few were performing above average academically.

The County borders the Capital city and has access to both physical and structural amenities.

3.2 Target Population

This refers to the entire group, event, or thing that the researcher seeks to study. (Sekaram, 2003). All Principals and D/Principals also known as Administrators in this context, were the research's target group, HODs & DOS's, teachers, and students. Each sample size made 0.3%, 1.1%, 2.8% and 95% of the sample population consecutively.

Table 3.0 Population size

Category	Sampling Frame	Percentage (%)
Administrators (Principals& D/Principals)	100	0.3
Dean of studies & H.O.Ds	300	1.1
Teachers	758	2.8
Students	25352	95
Total	26510	100

(Source: CDE Kajiado office, 2023)

3.3 Sampling Techniques and size

A given sample were interviewed by the researcher using a random sampling procedure. Carlo Ebeto (2017) claims that in simple random sampling, a smaller selection of people will be chosen at random but with the same probability from a bigger set. To collect the necessary data, 9%, 15%, 30%, and 45% of respondents from each stratum was chosen.

Table 3.1 Sample size

Category	Population	Percentage	Sample
Administrators	100	9%	30
D.o.S & H.o.D's	300	15%	50
Teachers	758	30%	100
Students	25352	45%	150
Total	26510	100%	330

3.4 Data Collection Instrument

Data from the respondents was gathered via questionnaire. The study's input came from the research instrument, hence the output (findings), including its quality and validity, was exclusively depended on it. Both open and closed-ended questions were included in the survey in order to collect both quantitative and qualitative data. According to Mugenda & Mugenda, (1999), questionnaires provide a detailed solution to challenging issues.

3.5 Research Instruments

The research collected data using a questionnaire. Data collection method in this case refers to the methodology and instrument used by the researcher during the data collection process. (Kothari, 2004).

3.6 Validity and Reliability

Prior to giving the questionnaire to the chosen sample, it was tested. Mugenda & Mugenda (1999), define validity as the precision and significance of conclusions drawn from research findings. To check for validity of the questionnaire, expert opinion was sought by discussing and assessing the relevance of the content used in the questionnaire developed. Feedback on the questionnaire from experts was incorporated in the final questionnaire.

On the other side, a research instrument's reliability refers to how consistently it produces results after numerous trials. The test-retest method was used to assess reliability. Three respondents from each subgroup received the questionnaire; replies were recorded, and the same respondents received it again two weeks later. A co-efficient was obtained and thus the questionnaire found reliable.

3.7 Data Analysis

Both quantitative and qualitative data was generated through the study. Using the SPSS, descriptive statistics and inferential analysis was used to analyze quantitative data. This method provided straightforward summaries of the sample data and manageable quantitative descriptions. Gupta (2004). (2004). To make the data easier to interpret, frequency distribution tables, bar charts, and pie charts were used.

Using a sample of a large population, inferential data analysis is used to draw generalizations about that population. A random sample of individuals from the wider group of people that one is interested in learning about was used in inferential analysis. On the basis of samples from each population, general inferences were drawn about each population in this study. (Andereck, K.L 2011).

Content analysis processed qualitative data gathered from key informants. It dealt with the quantitative approach's shortcomings. It looked at the other predictor variables as well as the academic performance response variable. The study questions determined how this strategy was utilized to analyze interviewee responses.

Multiple regression model was used for regression analysis. This method provided a way to model a quantitative outcome variable from regressor variables.

4.0: RESEARCH FINDINGS AND DISCUSSIONS

4.1 Questionnaire Return Rate

In the study that was conducted, respondents received 330 questionnaires, 293 of which were correctly completed and returned. This translated into a return value of 88.8%. Zikmund et al. (2010), stated that having at least 70% of the research instruments returned is sufficient and passes the test for empirical statistics, it was carefully considered that this rate would be extremely consistent for generalizing the study discoveries.

Table 4.0 Response Rate

Category	Frequency	Percentage
Returned	293	88.8
Not returned	37	11.2
Total	330	100

4.2 Reliability Results

The Cronbach Alpha Coefficients were calculated by the researcher using the completed questionnaire. Table 4.2 shows the determined and summarized results.

Table 4.2: Reliability Results

	Number of Items	Cronbach Alpha Coefficient
Workforce diversity	4	.835
Focus on change	4	.742
Team work	4	.842

The research instrument used in this study to collect data was regarded as credible because it provided a very high Cronbach's alpha coefficient which is above 0.7. The content validity of the research instrument greatly increased as a result of the researcher consulting regularly with the supervisor and other specialists in the education sector. When creating the study instrument, straightforward wording was also used to aid respondents in understanding the questionnaire's content. These Cronbach's alpha coefficients are consistent with Yin (2017)'s prescription of 0.7 and above as the dependability threshold.

4.3 Demographic characteristics

Personal data of each respondent was gathered to determine their personalities with reference to their understanding of the accuracy and dependability of the information they provided. Age, gender, and the respondents' level of education were factors that the researcher wanted to ascertain.

4.3.1 Age

Division of age groups was done and respondents asked to fill in their ages. This is significant because it allows us to determine if the respondents were normally distributed.

Table 4.3.1: Distribution of respondents by age

Age	Frequency	Percent
15-20	136	47.4
21-30	43	14.6
31-40	36	12
41-50	48	16
Above 50	30	10
Total	293	100

According to the study's findings regarding participant ages, the bulk of respondents 136 or 47.4% were between the ages of 15 and 20, while the minority 30 or 10% were above 50 years. Students were the majority of the respondents and thus the percentage. The age of the participants indicates their maturity levels and the path they take in answering the questions. In this situation, most participants were over 20 years, indicating that they were prepared to react objectively to the discussion topics.

4.3.2 Gender of the respondents

The research also considered the participants' gender. This was necessary in order to estimate the male to female participant ratio. This was critical information about the importance of gender balance. Gender responses are displayed in a table.

Table 4.3.2: Distribution by gender

Gender	Frequency	Percentage (%)
Female	127	43.3
Male	166	56.7
Total	293	100.0

According to the table, the majority of respondents (56.7%) were men and 43.3% were women. This indicates that respondents from both genders participated in the survey. The perception of the environment is influenced by gender in both social and biological ways. Men and women have distinct perspectives on the world and their experiences. Knowing the respondents' gender let the researcher better understand how gender disparities influenced their answers to the questions posed.

4.3.3 Respondents' level of Education

The research investigated the highest qualifications in terms of academics of the respondents. This provides information about the accuracy of the data collected based on the respondents' level of understanding.

Table 4.3.3: Respondents level of Education

Category	Frequency	Percent
Secondary	136	46.4
Diploma	42	14.3
Degree	99	33.7
Postgraduate	16	5.6
Total	293	100

The level of education showed that majority of the respondents who were students 46.4% had secondary education. 14.4% had diploma education, 33.7% had a degree, and 5.6% had postgraduate certification. The education level of the respondents was crucial in assisting the researcher in determining how knowledgeable and accurate the respondents would react to the questions. In other cases, if the students did not have a clear understanding of the question's assistance was given to help interpret the questions. As a result, recognizing the interviewees' academic level informed their knowledge level on the topic of discussion, which influenced how they responded to the questions in the questionnaire.

4.4 Influence of Team work on academic performance.

4.4.1 Descriptive statistics for Team work and Academic performance.

Team work-related four opinion statements were utilized, with responses on a five-point scale stretching from strongly agree (5) to strongly disagree (1). Table 4.6 below shows the results.

Table 4.4: Team work and Academic performance.

N=293	STATEMENTS	5	4	3	2	1	Mean	Std. Dev.
	The school has functional departments with departmental heads.	27.7%	43.6%	10.4%	8.7%	6.6%	4.51	0.635
	The teamwork of the teachers has enhanced students' academic success.	20%	28.3%	18%	17%	17.7%	3.41	0.741
	The administration of the school promotes teamwork among the staff and inspires them to do so.	21.1%	30.3%	19.3%	18.3%	11%	3.70	0.705
	The administration organizes team building activities.	13%	17.3%	18.3%	30.7%	20.7%	2.31	0.612
	Composite/Average mean						3.5	0.673

4.4 presents the study results on team work and academic performance of secondary schools in Kajiado County. Generally, participants agreed that schools had functional departments with departmental heads (Mean=4.51, SD=.635). The study participants agreed that teamwork of the teachers had enhanced students' academic success (Mean=3.41, SD=.741) and that the administration of the school promotes teamwork among the staff and inspires them to do so (Mean=3.70, SD=.705).

On the other hand, respondents disagreed that the administration organizes team building activities (Mean=2.31, SD=.612). The overall composite mean for all constructs was 3.5 which implies that participants generally agreed that there was team work and this positively influenced the academic performance of secondary schools in Kajiado County.

4.4.2 Correlation for Team work and Academic performance.

To examine how team work and academic performance of secondary schools in Kajiado County are related, a calculation of the scores using Pearson Moment correlation coefficient was one for team work as the independent variable and academic performance of secondary schools in Kajiado County as a dependent variable. Table 4.5 shows this relationship.

Table 4.4.1: Correlation for Team work and Academic performance.

		Academic performance of secondary schools in Kajiado County
Team work	Pearson Correlation	.780**
	Sig. (2-tailed)	.001
	N	293

**Correlation is significant at the 0.002 level (2-tailed). $r = 0.780$, $N = 293$, $P < .01$

Table 4.4.1 shows an association that is strongly positive ($r = .780$, $N = 293$, $p < .01$) between influence of team work and academic performance in the region of study. Studies have found that organizational teamwork can have a significant impact on performance. Salas et al. (2015) found that cooperation can improve communication, coordination, and decision-making, which can improve performance in complex activities. Similarly, teamwork was found to be positively associated to total team performance and individual job satisfaction in a meta-analysis by Mathieu et al. (2019). In order to encourage teamwork inside a company, leadership is essential. According to a study by Wang et al. (2020), transformational leadership, which entails inspiring and motivating staff, can strengthen organizational teamwork and boost productivity. In a similar vein, Huang et al. (2016) discovered that supportive leadership can promote teamwork and raise productivity. Implementing good organizational teamwork presents difficulties despite the potential rewards. For instance, Salas et al (2018)'s study discovered that team conflict, a lack of confidence in one another, and a breakdown in communication can all affect performance. Furthermore, a study by Rico et al. (2020) discovered that virtual and distant teamwork can provide extra difficulties for organizational teamwork, such as a lack of face-to-face contact and problems establishing trust.

4.4.3. Regression analysis for Team work.

To show the level of influence of team work and whether it is a significant predictor of academic performance of secondary schools in Kajiado County, a coefficient of determination (R^2) using regression analysis was used.

Table 4.4.3 Regression analysis for Team work and Academic performance.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.780 ^a	.742	.683	.563

a. Predictors: (Constant), Team work

The above Table 4.4.3 the R value is at .780 which shows a strong positive influence of team work on academic performance of secondary schools in Kajiado County. R^2 shows .742 on variation of academic performance of secondary schools in Kajiado County caused by team work.

An ANOVA test was also done to demonstrate if team work was a significant predictor of academic performance of secondary schools in Kajiado County.

Table 4.4.4 ANOVA of Team work and Academic performance.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	48.97	1	48.97	110.443	.000 ^b
	Residual	89.472	292	.669		
	Total	138.442	293			

a. Dependent Variable: Academic performance of secondary schools in Kajiado County

b. Predictors: (Constant), Team work

As shown on Table 4.4.4 where $[F(1, 292) = 110.443, P < .05]$ it clearly shows that team work influences academic performance of secondary schools in Kajiado County. A significant predictor has therefore been realized.

5.0 Summary: Influences of Team work on academic performance.

This established how team work influence the academic performance of secondary schools in Kajiado County. The overall composite mean for all constructs was 3.50 which implies that participants generally agreed that there was team work and this positively influenced the academic performance of secondary schools in Kajiado County. Additionally, a correlation of 0.780 was discovered, demonstrating a significant and strong connection between team work and academic performance of secondary schools in Kajiado County. The correlation table produced a significance p-value of 0.001, which is less than 0.05, this was an indication of a statistically significant association between team work and academic performance of secondary schools in Kajiado County.

5.2 Conclusion

From the findings, Teamwork greatly influenced the academic performance of secondary schools in Kajiado county. It had a correlation of 0.780. It discovered that schools had functional departments with departmental heads, the teamwork of the teachers in most schools enhanced students' academic success. It was also discovered that most school administrations promoted teamwork among the staff and inspired them to do so. The study also concluded that there could be more factors that affected academic performance in this region rather than just Teamwork as discussed above. There is actually minimal academic performance in some of the schools in Kajiado despite the fact that teamwork is being practiced.

5.3 Recommendations

To foster teamwork schools should provide opportunities for teachers to collaborate on lesson planning, curriculum development, and other projects. This can help build relationships and trust among staff and foster a sense of teamwork. Schools' administrators should encourage open and transparent communication among staff members. This can include regular staff meetings, feedback sessions, and opportunities for teachers to share their ideas and concerns. A positive school culture can also promote teamwork among staff. Schools should work to create a supportive and inclusive environment that values teamwork and collaboration.

School administrators should give room to bench-marking with other performing schools and school leaders within and outside the county to find out more on what the others are doing to achieve high academic performance.

5.4 Suggestions for further studies

Based on this study, a number of other related studies can be recommended. These are:

1. Factors affecting overall performance of learners in secondary schools in Kajiado, Kenya.
2. Influence of leadership development programs on the academic performance of learners in secondary schools in Kenya.
3. A similar study could also be carried out but from a different location.

REFERENCES

- Andereck, K. L. (2011), *Research Methods for Leisure, recreation and tourism*, 213-225-2011- cabdirect.org.
- Arar, K., & Korucu, A. T. (2020). The impact of teamwork on teacher efficacy and student academic achievement. *International Journal of Educational Development*, 77, 102218. doi: 10.1016/j.ijedudev.2020.102218.

- Aidoo, E., & Odoi, A. (2018). Organizational politics and performance: The intervening role of tribal diversity in the hospitality industry in Ghana. *Asian Journal of Economics, Business and Accounting* 7(4), 1-16. Retrieved from: <https://doi.org/10.9734/AJEBA/2018/43383>
- Bhattacharyya, K. (2019). Factors affecting academic performance of secondary school students. *International Journal of Research in Social Sciences*, 9(6), 39-53.
- Brun, A. S., & Leontyeva, Y. V. (2021). Teamwork as a determinant of school leadership in Russian schools. *International Journal of Educational Management*, 35(1), 47-62. doi: 10.1108/IJEM-03-2020-0111.
- Cheung, A. C., & Liu, D. (2018). The impact of teamwork on teacher professional development in Hong Kong schools. *Educational Research and Evaluation*, 24(1-2), 83-101. doi: 10.1080/13803611.2018.1428647.
- Datta, P., & Sahu, S. (2017). A study of the factors affecting the academic performance of students in government and private secondary schools. *International Journal of Advanced Research in Management and Social Sciences*, 6(3), 64-76.
- Foddy, W.H (1994), *Constructing questions for interviews and questionnaires: Theory and Practice in social research*. (New Ed.) Cambridge, UK: Cambridge University Press.
- Gitonga, M., & Kamure, S. (2014). The relationship between leadership styles and strategies and how to change this in line with changing ethics. *Journal of Business and Management*, 16(1), 37-47.
- González-Montesinos, M. J., Cazorla-Arias, M. J., & Berbel-Pineda, J. M. (2021). The impact of teamwork on academic achievement in secondary education. A case study in Spanish schools. *European Journal of Education Studies*, 8(8), 295-313. doi: 10.5281/zenodo.5407080.
- Hersey, P., & Blanchard, K. H. (1988). *Management of organizational behavior: Utilizing human resources* (5th ed.). Englewood Cliffs, NJ: Prentice Hall.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Sage Publications.
- Jackson, S. E., Ruderman, M. N., & Stone, D. L. (2010). *Diversity in work teams: Research paradigms for a changing workplace*. Washington, DC: American Psychological Association.
- Jawatir, P., Tria, I.U. (2021). *Effective principle leadership behaviors to improve the teacher performance and the student achievement*.
- Jones, S., Ololube, N.P. (2015). *A review of leadership theories, principles and styles management*, vol. 5, No.1, 2015, pp6-14 doi: 10.5923/j.mm20150501.02
- Keating, L. A., & Rains, W. J. (2019). The impact of teamwork on school leadership. *Educational Management Administration & Leadership*, 47(4), 626-646. doi: 10.1177/1741143218808359.
- Mark, I.H. (2018). *Relationship between teamwork and team performance: experiences from an ERPsim competition*. *Journal of Information Systems* 693-702
- Mathieu, J. E., Tannenbaum, S. I., Donsbach, J. S., & Alliger, G. M. (2019). A review and integration of team composition models: Moving toward a dynamic and temporal framework. *Journal of Management*, 45(1), 5-38. doi: 10.1177/0149206318794805
- Meier, C., Rüegg, R., Sturzenegger, A. J., & Perrenoud, B. (2020). Collaboration for school improvement: The impact of teamwork on Swiss school development. *International Journal of Educational Research*, 103, 101609. doi: 10.1016/j.ijer.2020.101609.

- Mugenda, O., Mugenda, A. (1999), *Research Methods, Quantitative and Qualitative*. ACTS Press, Nairobi- Kenya. *organization. Guiding principles for policy development in school education*. Output of the ET2020.
- Parnell, A., Szabo, C. P., & Nguyen, T. (2021). The impact of teamwork on teacher well-being in Australian schools. *Educational Management Administration & Leadership*, 49(2), 241-259. doi: 10.1177/1741143220948085.
- Raja, M. W., & Sabir, M. S. (2021). Teamwork: A key to enhancing the quality of education in Pakistani schools. *Journal of Educational Research and Reviews*, 15(1), 43-51. doi: 10.5897/JERR2020.0469.
- Rico, R., Vieira, L. A., & Gomes, J. F. S. (2020). The impact of virtual teamwork on team effectiveness: An empirical study. *Computers in Human Behavior*, 112, 106452. <https://doi.org/10.1016/j.chb.2020.106452>
- Salas, E., DiazGranados, D., Klein, C., Burke, C. S., Stagl, K. C., Goodwin, G. F., & Halpin, S. M. (2015). Does team training work? Principles for health care. *Academic Medicine*, 90(11), 1-7. doi: 10.1097/ACM.0000000000000934
- Salas, E., Tannenbaum, S. I., Cohen, D., & Latham, G. P. (2018). Developing teamwork in organizations: An evidence-based approach. *American Psychologist*, 73(4), 355-365. doi: 10.1037/amp0000295
- Sekhar, G. (2019). An empirical study on the factors affecting stakeholder management and its impact on performance: Evidence from Canada. *Journal of Business Research*, 104, 1-10. doi: 10.1016/j.jbusres.2019.05.001
- Shouvik, S., Mohammed, W.H. (2012). *The impact of Teamwork on work performance of employees: A study of faculty members in Dhofar University*. IJSR
- Vithal, R., & Jansen, J. D. (2019). Change management in schools: A focus on teacher professional development in South Africa. *Journal of Education for Teaching*, 45(1), 3-16. doi: 10.1080/02607476.2018.1557869
- Wang, J., Liu, J., & Yang, Y. (2020). Transformational leadership and employee performance: The mediating role of organizational teamwork. *Journal of Business Research*, 112, 206-216. doi: 10.1016/j.jbusres.2019.11.044
- Working Group Schools, (2018). *Teachers and school leaders in schools as learning*
- Yukl, G. (2012). *Leadership in organizations*. Pearson.
- Hesselgreaves, H., & Scholarios, D. (2014). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. *The International Journal of Human Resource Management*, 25(18), 2531-2551.
- Simons, T., & Roberson, Q. (2019). Why managers should care about fairness: The effects of aggregate justice perceptions on organizational outcomes. *Journal of Applied Psychology*, 104(8), 973-991. doi: 10.1037/apl0000392